



TSMC-00-488B

April 5, 2004

To: Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572
28 Davis Avenue
Poughkeepsie, N.Y. 12603

Subject: | Serial No. 10/791,014 03/02/04 |
| Chung-Shi Liu et al. |
| PREVENTION OF POST CMP DEFECTS IN |
| CU/FSG PROCESS |
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INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation
In An Application.

The following Patents and/or Publications are submitted to
comply with the duty of disclosure under CFR 1.97-1.99 and
37 CFR 1.56.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being
deposited with the United States Postal Service as first class
mail in an envelope addressed to: Commissioner for Patents,
P.O. Box 1450, Alexandria, VA 22313-1450, on April 12, 2004.

Stephen B. Ackerman, Reg.# 37761

Signature/Date

A handwritten signature in black ink, appearing to read "Steph B. Ackerman", is written over the date "4/12/04".

U.S. Patent 6,008,120 to Lee, "Silicon Oxynitride Cap for Fluorinated Silicate Glass Film in Intermetal Dielectric Semiconductor Fabrication," teaches use of the oxynitride ARC layer as the means for keeping fluoride away from the metal used to fill a via.

U.S. Patent 6,103,601 to Lee et al., "Method and Apparatus for Improving Film Stability of Halogen-Doped Silicon Oxide Films," discloses how FSG films can be densified by hydrogen ion bombardment.

U.S. Patent 6,121,164 to Yieh et al., "Method for Forming Low Compressive Stress Fluorinated Ozone/TEOS Oxide Film," discusses reducing stress in FSG layers.

The following two U.S. Patents disclose methods to form interconnects:

- 1) U.S. Patent 6,130,157 to Liu et al., "Method to Form an Encapsulation Layer Over Copper Interconnects."

- 2) U.S. Patent 6,136,680 to Lai et al., "Methods to Improve Copper-Fluorinated Silica Glass Interconnects."

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U.S. Patent 6,150,272 to Liu et al., "Method for Making Metal Plug Contacts and Metal Lines in an Insulating Layer by Chemical/Mechanical Polishing that Reduces Polishing-Induced Damage," discloses an organic layer over the FSG layer.

Sincerely,

A handwritten signature in black ink, appearing to read "SBA".

Stephen B. Ackerman,
Reg. No. 37761

Form PTO-1449

W. H. C.

**INFORMATION DISCLOSURE CITATION
IN AN APPLICATION**

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TSmc-00-488

Section Number

10/791,014

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Chung-Shi Liu et al.

Eric Duda

03/02/04

Group Art Unit

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

OTHER DOCUMENTS (Including Author, Title, Date, Portion and Pages, Etc.)

Документ

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.